

Contributors to This Issue

Note: The anniversary article, "Fifty Years of BSTJ," was prepared under the auspices of the BSTJ Editorial Committee. Principal contributors were former Editorial Committee Chairman (1958-66) A. C. Dickieson, and current Committeemen A. E. Joel, Jr., and W. E. Danielson.

YO-SUNG CHO, B.S.E.E., 1962, Seoul (Korea) National University; M.S., 1966, and Ph.D., 1968, Yale University; Honeywell E.D.P. Division, 1964-1965 and 1967-1969; Bell Laboratories, 1969—. Mr. Cho has made equalization studies of the L5 Coaxial Transmission System employing manual and automatic equalizers. He was also engaged in the development of the equalizer adjustment unit which will be used for the optimal equalization of the L5 system. He is currently working on exploratory repeaters for the new long-haul coaxial transmission system. Member, IEEE.

CECIL H. COKER, B.S. (Electrical Engineering), 1954, and M.S. (Electrical Engineering), 1956, Mississippi State University; Ph.D. (Electrical Engineering, minor in Physics), 1960, University of Wisconsin; Electrical Engineering Department, University of Wisconsin, 1960-1961; Bell Laboratories, 1961—. Mr. Coker worked for several years on analysis and synthesis of speech. Subsequent work includes supervision of the development of four laboratory computer facilities, and continued research in the synthesis of speech from English text. Mr. Coker, a supervisor in the Acoustics Research Department, holds several patents and has written a number of papers on speech analysis and synthesis.

JAMES L. FLANAGAN, B.S., 1948, Mississippi State University; S.M., 1950, and Sc.D., 1955, Massachusetts Institute of Technology. Faculty of Electrical Engineering, Mississippi State University, 1950-1952; Air Force Cambridge Research Center, 1954-1957. Bell Laboratories, 1957—. Mr. Flanagan has worked in speech and hearing research, computer simulation and digital encoding, and acoustics research. He is Head, Acoustics Research Department. Fellow, IEEE; Fellow, Acoustical Society of America; Tau Beta Pi; Sigma Xi; member of several government and professional society boards, including com-

mittees of the National Academy of Sciences and the National Academy of Engineering.

KENZO ISHIZAKA, B.S., 1953, and M.S., 1955, Tohoku University, Sendai, Japan; Toyo Communication Equipment Co., 1955-1962; University of Electro-Communications, Tokyo, Japan, 1962—. Bell Laboratories, 1970-1971. Mr. Ishizaka has been engaged in research on computer simulation of speech. Member, Acoustical Society of America, Acoustical Society of Japan, Institute of Electronics and Communication Engineers of Japan.

NUGGEHALLY S. JAYANT, B.Sc., 1962, University of Mysore (India); B.E. (Distinction), 1965, and Ph.D., 1970, Indian Institute of Science, Bangalore; Research Associate, Stanford Electronics Laboratories, 1967-68; Visiting Scientist, Indian Institute of Science, January-March, 1972; Bell Laboratories, 1968—. Mr. Jayant has worked on digital communication in the presence of burst-noise; and on the detection of fading signals. His current interests include source encoding and pattern discrimination. Member, IEEE.

WALTER J. KROPFL, B.S.E.E., 1956, Pennsylvania State University; M.S.E.E., 1970, Stevens Institute of Technology; Walter Reed Army Institute of Research, 1957-1966; Bell Laboratories, 1966—. Mr. Kropfl is a member of the Sensory and Perceptual Processes Department where he is currently engaged in the design of mini-computer hardware and software systems to control psychological and psychophysical experiments. Member ACM, Eta Kappa Nu.

ANATOL KUCZURA, B.S. (Engineering Physics), 1961, University of Illinois; M.S. (Mathematics), 1963, University of Michigan; M.S.E.E., 1966, New York University; Ph.D. (Mathematics), 1971, Polytechnic Institute of Brooklyn; Bell Laboratories, 1963—. From 1963 to 1966, Mr. Kuczura worked in military systems engineering. Since 1966, he has been engaged in research on the application of probability theory and stochastic processes to the analysis of telephone traffic and queueing. Member, ORSA, SIAM, American Mathematical Society, Mathematical Association of America, AAAS, Chi Gamma Iota, Pi Mu Epsilon.

TERRENCE A. LENAHAN, B.S. and M.S. (Electrical Engineering), 1964, Massachusetts Institute of Technology; Ph.D (Applied Mathe-

matics), 1970, University of Pennsylvania; Bell Laboratories, 1970—. Mr. Lenahan's major interests at Bell Laboratories have been integral and differential equations related to crosstalk in cables. Member, Eta Kappa Nu, Sigma Xi.

DIETRICH MARCUSE, Diplom Vorpruefung, 1952, Dipl. Phys., 1954, Berlin Free University; D.E.E., 1962, Technische Hochschule, Karlsruhe, Germany; Siemens and Halske (Germany), 1954-57; Bell Laboratories, 1957—. At Siemens and Halske, Mr. Marcuse was engaged in transmission research, studying coaxial cable and circular waveguide transmission. At Bell Laboratories, he has been engaged in studies of circular electric waveguides and work on gaseous masers. He spent one year (1966-1967) on leave of absence from Bell Laboratories at the University of Utah. He is presently working on the transmission aspect of a light communications system. Mr. Marcuse is the author of two books. Member, IEEE, Optical Society of America.

JAMES MCKENNA, B.Sc. (Mathematics), 1951, Massachusetts Institute of Technology; Ph.D. (Mathematics), 1961, Princeton University; Bell Laboratories, 1960—. Mr. McKenna has done research in quantum mechanics, electromagnetic theory, and statistical mechanics. He has recently been engaged in the study of nonlinear partial differential equations that arise in solid state device work, and in the theory of stochastic differential equations.

J. A. MORRISON, B.Sc., 1952, King's College, University of London; Sc.M., 1954, and Ph.D., 1956, Brown University; Bell Laboratories, 1956—. Mr. Morrison has been doing research in a variety of problems in mathematical physics and applied mathematics. His recent interests have included the theory of stochastic differential equations and propagation in random media. He was a Visiting Professor of Mechanics at Lehigh University during the Fall semester, 1968. Member, American Mathematical Society, SIAM, Sigma Xi.

J. R. PIERCE, B.S., 1933, M.S., 1934, and Ph.D., 1936, California Institute of Technology; Bell Laboratories, 1936-1971. Mr. Pierce has worked in the fields of microwave tubes and communication, communication satellites, and acoustics. At Bell Laboratories he became Executive Director-Research, Communication Sciences Division. He is now Professor of Engineering at the California Institute of Technology. Mr. Pierce has received various awards including the Morris

Liebman Memorial Award, the Edison Medal, the Poulsen Medal, and the Cedegren Medal. He has received seven honorary degrees.

LAWRENCE R. RABINER, S.B. and S.M., 1964, and Ph.D. (E.E.), 1967, Massachusetts Institute of Technology; Bell Laboratories, 1962-1964, 1967—. Mr. Rabiner has worked on digital circuitry, military communications problems, and problems in binaural hearing. Since 1967, he has been engaged in research on speech communication, signal analysis, digital filtering, and techniques for waveform processing. Member, Eta Kappa Nu, Sigma Xi, Tau Beta Pi, IEEE; Fellow, Acoustical Society of America. Mr. Rabiner is chairman of the IEEE G-AE Technical Committee on Digital Signal Processing, associate editor of the IEEE Transactions on Audio and Electroacoustics, and member of the technical committees on speech communication of both IEEE and the Acoustical Society.

ERIC WOLMAN, A.B., 1953, A.M., 1954, and Ph.D., 1957, Harvard University; Bell Laboratories, 1957—. Mr. Wolman has been concerned with various aspects of traffic flow in communication systems, and now heads the Traffic Research Department. He is a member of the editorial board of the SIAM Journal on Applied Mathematics, and served as visiting lecturer in applied mathematics at Harvard in the Spring term of 1964. Member, AAAS, AMS, IEEE, ORSA, Phi Beta Kappa, Sigma Xi, SIAM.